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09/862,386	05/22/2001	Carpenter Robert Leonard	CRL-1	8679

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EXAMINER

PENDLETON, BRIAN T

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,386

Applicant(s)

LEONARD, CARPENTER ROBER

Examiner

Brian T. Pendleton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claim 1** is rejected under 35 U.S.C. 102(b) as being anticipated by Spector, US Patent 6,015,160 (hereafter referenced as Spector).

Spector discloses a combined safety helmet and PA (public address) system for a bicyclist to broadcast to those within hearing range of the system. The system is illustrated in Figures 1-5. As discussed in column 1 line 65 – column 2 line 1, the system has a miniature public address system which functions as a bullhorn. This characterization of the invention reads on “a megaphone”. A megaphone is interpreted as an audio device having the capability of broadcasting audio.

The PA system of Spector comprises a helmet H, microphone 13 and gooseneck 12, as exhibited in Figure 1. The helmet H has the microphone 13 attached to it and is formed by an outer shell 11 which is shaped to fit onto the head of a bicyclist as disclosed in column 3 lines 3-10 thereby reading on “a headset including a microphone assembly” wherein the entire helmet H reads on “a headset” and the microphone 13 and gooseneck 12 forms the microphone assembly which reads on “including a microphone assembly”.

The microphone assembly of Spector includes a evident microphone 13, which reads on “said microphone assembly including a microphone”. As illustrated in figures 1 and 2, the helmet H has a curved outer shell 11, which reads on the headset including “a curved member for attaching the microphone assembly to a user” wherein the outer shell 11 reads on “a curved member” and the microphone 13 and gooseneck 12 are attached to the user via the helmet H and its outer shell 11 which reads on “attaching the microphone assembly to a user”. The gooseneck 12 connects the microphone 13 to the outer shell 11 of helmet H which reads on “a stalk connecting the microphone to the curved member” wherein the gooseneck 12 reads on “stalk” and the microphone 13 is connected to the outer shell 11 by means of the gooseneck 12 which reads on “connecting the microphone to the curved member”.

As disclosed in column 3 lines 16-22, the gooseneck 12 can be bent to any desired curvature to position the microphone 13 adjacent to the mouth 14 of the user, which reads on “being capable of being bent to position the microphone adjacent to the user’s mouth for hands-free operation” wherein the gooseneck 12 is bendable which reads of “being capable of being bent” and the microphone 13 is placed next to the bicyclist’s mouth which reads on “position the microphone adjacent to the user’s mouth” and as the microphone assembly is attached to the user’s helmet, the user does not grasp it, which reads on “hands-free operation”.

Figure 3 and column 3 lines 36-39 disclose a public address (PA) unit 19 which is clipped by means of clip 20 to a waist belt 21 (note: Spector has two items numbered 21, the waist belt and amplifier) worn by the bicyclist which reads on “a body pack provided with a belt for securing the body pack about the waist of the user” wherein the integral PA unit 19 and clip 20 read on “a body pack” and the waist belt 21 reads on “provided with a belt for securing the body

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pack about the waist of the user". Column 3 line 44 discloses that the PA unit 19 has a speaker 22 attached to the mouth of a small horn 23 which reads on "the body pack incorporating an output horn" wherein the small horn 23 reads on "an output horn". In addition, column 4 lines 1-2 discloses that the speaker should face forward which reads on the output horn "which is mounted to be forwardly-directed in use" wherein the speaker 22 is attached to the horn 23 and accordingly when the speaker 22 faces forward the horn 23 faces forward, or in other words, is forwardly directed in use.

Column 3 lines 22-30 and figure 1 disclose that the microphone 13 is connected by cable 15 which runs through gooseneck 12 and the liner of the helmet H out of opening 16 and terminates at plug 17, the plug 17 being plugged into an input socket 18 on PA unit 19 which reads on "a flexible cable connecting the microphone assembly to the body pack" wherein the cable 15 reads on "a flexible cable", the cable being flexible by its ability to be extended through the gooseneck 12 which itself is flexible and bendable. The cable connects the microphone 13, which is part of the microphone assembly formed by the microphone 13 and gooseneck 12, to the integral PA unit 19 and clip 20 which reads on "connecting the microphone assembly to the body pack" wherein the PA unit 19 and clip 20 represent the "body pack".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

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matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Spector in view of Garth, Sr. US Patent 5,933,511 (hereafter referenced as Garth).

Regarding claim 2, Spector discloses a combined safety helmet and PA (public address) system for a bicyclist to broadcast to those within hearing range of the system. The system is illustrated in Figures 1-5. As discussed in column 1 line 65 – column 2 line 1, the system has a miniature public address system which functions as a bullhorn. This characterization of the invention reads on “a megaphone”. A megaphone is interpreted as an audio device having the capability of broadcasting audio.

The PA system of Spector comprises a helmet H, microphone 13 and gooseneck 12, as exhibited in Figure 1. The helmet H has the microphone 13 attached to it and is formed by an outer shell 11 which is shaped to fit onto the head of a bicyclist as disclosed in column 3 lines 3-10 thereby reading on “a headset incorporating a microphone assembly” wherein the entire helmet H reads on “a headset” and the microphone 13 and gooseneck 12 forms the microphone assembly which reads on “incorporating a microphone assembly”.

The microphone assembly of Spector includes a evident microphone 13, which reads on “said microphone assembly including a microphone for receiving voice signals from a user” wherein the microphone 13 reads on “a microphone” and the microphone 13 is used to broadcast messages from the bicyclist which reads on “for receiving voice signals from a user”. As illustrated in figures 1 and 2, the helmet H has a curved outer shell 11, which reads on the headset incorporating “a curved member for attaching the microphone assembly to the user”

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wherein the outer shell reads on “a curved member” and the microphone 13 and gooseneck 12 are attached to the user via the helmet H and its outer shell 11 which reads on “attaching the microphone assembly to the user”. The gooseneck 12 connects the microphone 13 to the outer shell 11 of helmet H which reads on “a stalk connecting the microphone to the curved member” wherein the gooseneck 12 reads on “stalk” and the microphone 13 is connected to the outer shell 11 by means of the gooseneck 12 (stalk) which reads on “connecting the microphone to the curved member”.

As disclosed in column 3 lines 16-22, the gooseneck 12 can be bent to any desired curvature to position the microphone 13 adjacent to the mouth 14 of the user, which reads on “being capable of being bent to position the microphone adjacent to the user’s mouth for hands-free operation” wherein the gooseneck 12 is bendable which reads on “being capable of being bent” and the microphone 13 is placed next to the bicyclist’s mouth which reads on “to position the microphone adjacent to the user’s mouth” and as the microphone assembly is attached to the user’s helmet, the user does not grasp it, which reads on “hands-free operation”.

Figure 3 and column 3 lines 36-39 disclose a public address (PA) unit 19 which is clipped by means of clip 20 to a waist belt 21 (note: Spector has two items numbered 21, the waist belt and amplifier) worn by the bicyclist which reads on “a body pack incorporating a belt for securing the body pack about the waist of the user” wherein the integral PA unit 19 and clip 20 read on “a body pack” and the waist belt 21 reads on “a belt for securing the body pack about the waist of the user”. Column 3 line 44 discloses that the PA unit 19 has a speaker 22 attached to the mouth of a small horn 23 which reads on “an output horn”. The small horn 23 is contained within the PA unit 19 which is mounted onto the belt 21 via the clip 20 which reads on the output

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horn "which is mounted on the belt". In addition, column 4 lines 1-2 discloses that the speaker should face forward which reads on the output horn "to be forwardly-directed in use" wherein the speaker 22 is attached to the horn 23 and accordingly when the speaker 22 faces forward the horn 23 faces forward, or in other words, is forwardly directed in use.

Column 3 lines 40-48 and figure 4 disclose that the PA unit 19 contains a rechargeable battery pack 24 and amplifier 21 which reads on a body pack incorporating "a battery pack, an electronic module which is powered by the battery pack and provides an audio frequency amplifier having a low signal level input and a high signal level output arranged to supply audio frequency power to the output horn" wherein battery pack 24 reads on "a battery pack" and amplifier 21 reads on "an electronic module which is powered by the battery pack and provides an audio frequency amplifier having a low signal level input and a high signal level output arranged to supply audio frequency power to the output horn" wherein the amplifier 21 reads on "electronic module", which is powered by battery pack 24 as disclosed in figure 4 reading on "powered by the battery pack"; the amplifier 21 amplifies signals from microphone 13 and outputs the signals to output horn 23 which reads on "provides an audio frequency amplifier having a low signal level input and a high signal level output arranged to supply audio frequency power to the output horn".

Column 3 lines 22-30 and figure 1 disclose that the microphone 13 is connected by cable 15 which runs through gooseneck 12 and the liner of the helmet H out of opening 16 and terminates at plug 17, the plug 17 being plugged into an input socket 18 on PA unit 19 which reads on "a flexible cable connecting the headset to the body pack to conduct audio signals from the microphone to the input of the audio frequency amplifier" wherein the cable 15 reads on "a

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flexible cable”, the cable 15 connects the microphone 13, which is part of the headset (helmet H), to the integral PA unit 19 and clip 20 which reads on “connecting the headset to the body pack”, and the microphone signals are input to the PA unit 19 which contains amplifier 21 which reads on “to conduct audio signals from the microphone to the input of the audio frequency amplifier” wherein the amplifier 21 is the electronic module which contains the audio frequency amplifier.

Spector does not disclose “a high frequency audio tone generator connected to the low signal level input of the audio frequency amplifier, and manually operable means for controlling the tone generator to output an audio tone of substantially constant frequency to the input at an amplitude which overrides any voice signals from the microphone” and that “when the manually operable means is not being operated to output an audio frequency tone to the input of the amplifier the amplifier acts to amplify voice signals from the microphone”.

In the related art of hands-free broadcast systems, Garth, Sr. discloses a hands-free amplification system comprising an a microphone 12 for receiving voice signals from the user, cord 16, amplifier housing 36 having an input port 48, alarm button 60 and speaker 54 in figures 1 and 2. Column 1 line 49 – column 2 line 28 discloses that voice signals from the microphone 12 are sent to the amplifier housing 36 via the cord 16 and broadcast through speaker 54. Column 5 lines 21-25 disclose an alarm button 60 that when depressed emits a high pitched loud audible alarm which reads on “a high frequency audio tone generator connected to the low signal level input of the audio frequency amplifier and manually operable means for controlling the tone generator to output an audio tone of substantially constant frequency to the input at an amplitude which overrides any voice signals from the microphone” wherein the high pitched

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loud audible alarm reads on “a high frequency audio tone generator”. The alarm is part of the amplification system of Garth, Sr. which reads on “connected to the low signal level input of the audio frequency amplifier” and the alarm button 60 reads “manually operable means for controlling the tone generator”. The alarm is used to draw the attention of bystanders when loud vocalizing is not possible, which reads on “to output an audio tone of substantially constant frequency to the input at an amplitude which overrides any voice signals from the microphone” whereby the audible alarm is louder than the voice signals from the microphone 12. It was evident to one of ordinary skill in the art that if the alarm button 60 was not pressed, the amplification system would be configured to amplify voice signals from the microphone 12 which reads on “when the manually operable means is not being operated to output an audio frequency tone to the input of the amplifier the amplifier acts to amplify voice signals from the microphone.” The advantage of this feature was to be able to warn nearby people if the signals broadcast from the microphone 12 through speaker 54 were not loud enough by providing a high tone audio signal, therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Spector to include the audible alarm and alarm button 60 of Garth, Sr. for the purpose of alerting people in the vicinity of the bicycle of the user’s presence when amplified voiced signals would not be loud enough.

3. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Spector in view of Clegg et al, US Patent 6,490,362 (hereafter referenced as Clegg) and further in view of Libertucci, US Patent 5,353,975 (hereafter referenced as Libertucci).

Spector discloses a combined safety helmet and PA system functioning as a bullhorn which reads on “a megaphone”. The apparatus is directed to a hands-free public address system

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for use for bicyclists for obviate the difficulty of using a bullhorn and navigating a bicycle at the same time. In figure 1, Spector discloses helmet H, microphone 13 and gooseneck 12, which reads on "a headset incorporating a microphone assembly, said microphone assembly including a microphone for receiving voice signals from a user" wherein microphone 13 and gooseneck 12 represent the microphone assembly. Figure 3 discloses a PA unit 19 comprising a clip 20, waist belt 21, output horn 23, battery pack 24, and volume control 26 which reads on "a body pack incorporating a belt for securing the body pack about the waist of the user" wherein PA unit 19, clip 20 and waist belt 21 read on the "body pack". As shown in figure 4, the volume control 26 is part of the amplifier 21 and coupled to output horn 23 and battery pack 24, which reads on "an electronic module... which is powered by the battery pack and provides an audio frequency amplifier having a low signal level input and a high signal level output arranged to supply audio frequency power to the output horn" wherein the volume control 26 and amplifier 21 read on "electronic module". Spector also discloses a cable 15 which runs from the microphone 13 to the PA unit 19 which reads on "a flexible cable connecting the headset to the body pack to conduct audio signals from the microphone to the input of the audio frequency amplifier such that the amplifier acts to amplify voice signals from the microphone". Spector does not disclose that the headset incorporates "a curved ear hook member which is pre-formed to locate about the ear of the user, and a stalk connecting the microphone to the curved member and being capable of being bent to position the microphone adjacent to the user's mouth for hands-free operation" and a "belt including an elongate flexible panel having opposite ends, a pair of straps secured to opposite ends of said panel, and a pair of moulded snap-fit connector parts secured to the two straps".

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In the similar field of hands-free communication, Clegg discloses a ear-hook boom microphone device 10 in figure 1 comprising microphone housing 12, boom 14, ear-hook 16 and microphone cord 18 which reads on a headset incorporating "a curved ear hook member which is pre-formed to locate about the ear of the user, and a stalk connecting the microphone to the curved member and being capable of being bent to position the microphone adjacent to the user's mouth for hands-free operation" wherein ear-hook 16 reads on "a curved ear hook member" and boom 14 reads on "a stalk connecting the microphone to the curved member". Column 4 lines 14-37 discloses that the boom 14 is made from a pliable material that allows the user to bend it, which reads on "being capable of being bent to position the microphone adjacent to the user's mouth for hands-free operation".

In column 3 lines 28-32, Spector suggested the advantage of his apparatus was that only the microphone of the public address system was attached to the helmet, thereby reducing the load on the helmet. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the Spector apparatus by substituting the hands-free ear-hook boom microphone device 10 disclosed by Clegg for the microphone assembly comprising the microphone 13 and gooseneck 12 for the purpose of further diminishing the weight of the helmet by having all of the components of the public address system external to the helmet and eliminating the sight impediment caused by having a microphone in front of the user's eyes.

The combination of Spector and Clegg does not disclose a "belt including an elongate flexible panel having opposite ends, a pair of straps secured to opposite ends of said panel, and a pair of moulded snap-fit connector parts secured to the two straps". Libertucci discloses a carrier 1 (belt) for a portable stereo unit comprising pouch 2, straps 6 and 8, interlocking members 10

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and 12, and covering flap 20 in figure 1. As disclosed in column 2 lines 65-66, pouch 2, which is a panel, is made of a flexible fabric which reads on “an elongate flexible panel having opposite ends”. Straps 6 and 8 are secured on opposite sides of the pouch 2 reading on “a pair of straps secured to opposite ends of said panel”. Interlocking members 10 and 12, which are shaped (moulded) to receive each other, read on “a pair of moulded snap-fit connector parts secured to the two straps”. Spector suggested in column 3 line 62 – column 4 line 2, that it was not essential for the PA unit 19 to be clipped onto a waist belt, thereby offering alternative methods of mounting the output horn 23, battery pack 24 and volume control 26. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modifying the combination of Spector and Clegg by mounting the PA unit 19 in the pouch 2 of Libertucci, specifically in the center compartment 14, for the purpose of protecting the PA unit 19 from the elements encountered during a bicycle ride, providing a stable carrying environment for the public address speaker and projecting the broadcast audio signal aligned with the line of sight of the user. Appropriately, the combination of Spector, Clegg and Libertucci discloses “an output horn which is mounted proximate the center of the panel to be forwardly-directed in use, a battery pack mounted between the output horn and one of said ends, and an electronic module mounted between the output horn and the other of said ends” in view of the fact that PA unit 19 of Spector, as modified, is centered and output horn 23 lies between battery pack 24 on one end and volume control 26, which is part of the electronic module, on the other end.


Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (703) 305-9509. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


btp

**BRIAN PENDLETON
PATENT EXAMINER**